

# 797AB-800 1

# HEAVY DUTY TOP AND BOTTOM FEED LOCKSTITCHER

# Instruction Manual Parts Catalog

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# 2. Parts Catalog

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#### 1. Safety precautions:

- 1) When turning the power on, keep your hands and fingers away from the area around/under the needle and the area around the pulley.
  - 2) Power must be turned off when the machine is not in use, or when the operator leaves the seat.
- 3) Power must be turned off when tilting the machine head, installing or removing the "V" belt, adjusting the machine, or when replacing.
- 4) Avoid placing fingers, hairs, bars etc., near the pulley, "V" belt, bobbin winder pulley, or motor when the machine is in operation.
- 5) Do not insert fingers into the thread take-up cover, under/around the needle, or pulley when the machine is in operation.
- 6) If a belt cover, finger guard, eye guard are installed, do not operate the machine without these safety devices.

#### 2. Precautions before starting operation:

- 1) Never operate the machine before filling the machine's oil pan.
- 2) When a new sewing machine is first turned on, verify the rotational direction of the pulley with the power on.
  - 3) Verify the voltage and phase (single or three) with those given on the machine nameplate.

#### **3. Precautions for operating conditions:**

- 1) Avoid using the machine at abnormally high temperatures  $(35^{\circ}\text{C} \text{ or higher})$  or low temperatures  $(5^{\circ}\text{C} \text{ or lower})$ .
  - 2) Avoid using the machine in dusty conditions.

#### 4. Specifications:

Model Specifications		GC0388-GD		
Max	a. sewing speed	2,000 rpm		
S	Stitch length	0-5.0mm (Ordinary sewing 0—8.0 mm)		
Alterr	nating movement	2.0-3.0mm (Ordinary sewing 2.0-5.0 mm)		
ruffli	ing sewing ratio	1:1-2:1		
Adjust the ratio of ruffling sewing		Dial		
Thread take-up lever stroke		73.0 mm		
Nee	edle bar stroke	38.0 mm		
	Needle	DP×17 22#		
Presser	By hand	6.0 mm		
foot stroke	By knee	16.0 mm		
	Hook	Fully rotating automatic lubricaton(for		
HOOK		thread trimmer) Large		
Lubrication system		Automatic		
Th	read trimmer	0		

#### **5.** Power cable connection:

Each connector(plug) should be completely set in the corresponding receptacle of the control box after checking the connector shape and mating direction.

(1) When a three-phase motor is used, connect "U" phase to the red lead, "V" phase to the white lead, "W" phase to the black lead. Motor rotation direction depends on the internal switch setting in the control box.

Note: The green wire must be connected to the ground terminal in order to properly ground the

(2) The appropriate power fuse capacity is as follows:

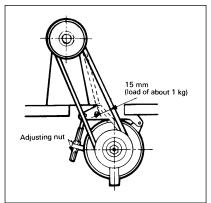
Three-phase power source: 200-240V: 10A Single-phase power source: 100-120V: 15A

#### 6. Installing the belt (Fig.1):

motor.

1) Use a V-belt for sewing machine use, type M.

2) To adjust the belt tension, change the motor height by turning the tension adjust nuts so that the belt sinks about 15mm when depressed by hand at the center of the belt span. If the tension is too low, the speed may not be consistent in the low or medium range, or the needle may not stop in the proper position. If the tension is too high, the motor bearings will deteriorate more rapidly.



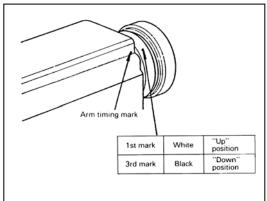
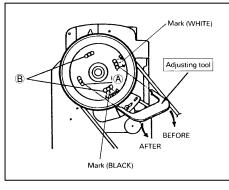


Fig.1 Fig.2

#### 7. Adjustment of needle bar stop position(Fig2, Fig3, Fig4):



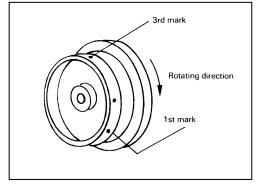


Fig.3

Fig.4

1) Adjustment of "UP" position

When the pedal is kicked down by heel to cut the thread, the machine stops in the "UP" position. If the marks deviate more than 3mm, adjust as follows:

- (1) Disconnect the plug (12 pins) from the control panel;
- (2) Run the machine and stop in the "UP" position;

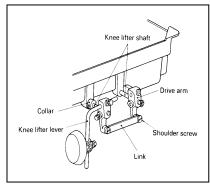
- (3) While holding the pulley, insert the adjusting tool into the two holes marked "A", then rotate the pulley.
  - 2) Adjustment of "DOWN" position

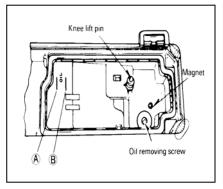
When the pedal is returned to the neutral position, the machine stops in the "DOWN" position. If the marks deviate more than 3mm, adjust as follows:

- (1) Disconnect the plug (12 pins) from the control panel;
- (2) Run the machine and stop in the "DOWN" position;
- (3) While holding the pulley, insert the adjusting tool into the two holes marked "B", then rotate the pulley.
  - 3) Confirm the stop operation then the plug (12 pins) coming from the machine head into the receptacle.

#### 8. Installing the knee lifter (Fig.5):

- 1) Pull out the knee lifter shafts (on the right and left) as far as possible, and properly set them.
- 2) Install the drive arm on each shaft.
- 3) Set a link between the right and left drive arms to connect them.
- 4) Install the knee lifter lever on the left drive arm.





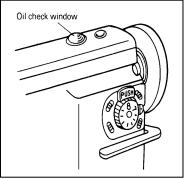


Fig.5

Fig.6

Fig.7

#### 9. Lubrication (Fig.6):

Pour oil up to position "A" of the oil tank.

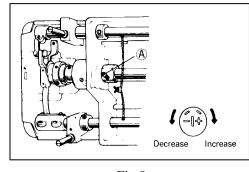
During operation, check the oil level periodically, and in cases where the oil level is below position "B", replenish the oil supply up to position "A".

Use white spindle oil.

#### 10. Condition of oil lubrication (Fig.7):

While operating the machine, check the condition of oil lubrication through the oil check window.

#### 11. Adjustment of the hook lubrication (Fig.8):



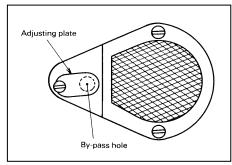


Fig.8

Fig.9

Adjustment can be done by turning screw "A".

(1) When the screw has been fully tightened ..... Maximum

(2) When the screw has been fully loosened ..... Maximum

Note: After adjustment of this screw, the machine should be operated for at least 30 seconds, then check the oil mist from the hook.

#### 12. Adjustment of oil pump (Fig.9):

The standard adjustment is as follows:

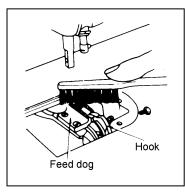
The adjusting plate keeps the bypass hole fully closed. To decrease splashing, open the bypass hole appropriately.

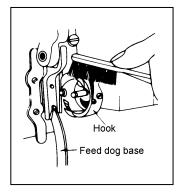
#### 13. Periodical cleaning (Fig.10, Fig.11, Fig.12):

Clean the feed dog, hook and oil pump periodically.

Maintenance of motor: Remove dust from the motor filter every one or two months.

Control box: Remove dust from the connector.





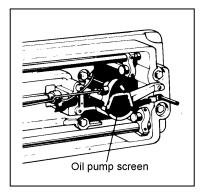


Fig.10

Fig.11

Fig.12

#### 14. Handling instructions (Motor and control box ):

- 1) Keep your feet away from the pedal when turning the power on or off.
- 2) Always turn the power off when leaving your seat.
- 3) The brakes may fail if the power is switched off or power failure occurs during operation of the sewing machine.
- 4) The control box cover must be kept closed during machine operation to prevent misfunction caused by the entry of dirt.
- 5) The control circuitry must not be checked with a multimeter to protect the semiconductor parts from voltage.
  - 6) The power switch must be turned off before tilting the machine head or touching the needle.
- 7) The three-phase motor must be grounded using ground wire (GREEN). The single-phase motor must not be wired to a starburst connection.
- 8) When manipulating the switch in the control box, first turn off the power switch, then open the front cover (Fig.16). If you have to open the bottom cover, wait for 10 minutes after the power switch has been turned off, since a high voltage is applied inside the box. (This is vital to discharge the built-in capacitors).
  - 9) Use the motor away from high noise sources such as high-frequency welders.
  - 10) A suitable capacity is 15A for a single-phase, and 10A for three-phase motor respectively.
- 11) The detector uses an optical detecting element. Do not allow dirt, dust, oil etc., to attach to the detecting plate when the machine pulley has been removed for adjustment. If dirty, gently wipe it off while avoiding scratching the plate. Also, care should be taken to avoid oil soaking into the crevices in the plate.

#### 15. Installation of belt cover:

Be sure to install the belt cover for safety.

#### 16. How to wind the lower thread (Fig.13):

Strength of winding: Particularly in the case of nylon or polyester thread, wind the bobbin loosely.

Uneven winding: If the bobbin is wound unevenly, slide the thread guide toward the less wound portion of bobbin.

Winding amount: When the bobbin is wound excessively, loosen the adjusting screw. When the bobbin is wound insufficiently, tighten the adjusting screw.

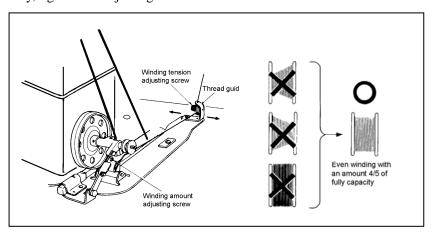


Fig.13

#### 17. How to attach a needle (Fig.14):

Note: Before attach the needle, be sure to turn the power switch off.

Note: If thread snapping occurs during reverse sewing with polyester, it may be avoided by fitting the needle with the long groove shifted to the front side. Normally, avoid fitting the needle with the groove facing backward.

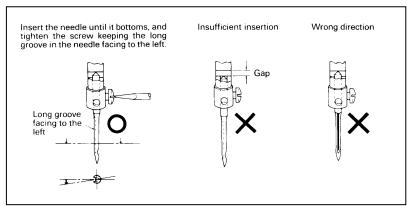


Fig.14

#### 18. How to route the upper thread (Fig.15):

Raise the thread take-up lever to its highest possible position, and route the upper thread in the order illustrated below.

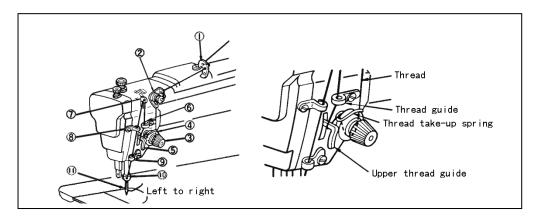


Fig.15

#### 19. Adjustment of stitch length and reverse sewing (Fig.16):

- 1) To change the stitch length, rotate the stitch length adjusting dial while pressing the "push" lever.( the max. stitch length is 5mm while ruffling sewing , the max. stitch length is 8mm while Ordinary sewing)
  - 2) Pressing the stitch length adjusting lever for reverse stitching. (Sew with automatic reverse sewing when ruffling sewing)

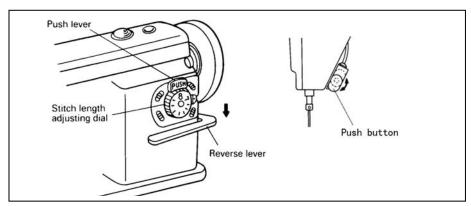


Fig.16

## 20. Adjusting the thread tension (Fig.17):

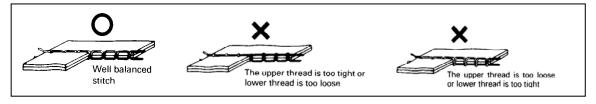


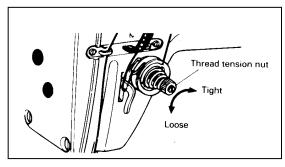
Fig.17

## 21. Upper thread tension (Fig.18):

- 1) The upper thread can be adjusted based on the lower thread tension.
- 2) Adjustment can be done by rotating the thread tension nut. For special fabric sewing with special thread, the desired tension can be obtained by adjusting the strength and operating range of thread take-up spring.

#### 22. Lower thread tension (Fig.19):

Lower thread tension can be adjusted by rotating screw "A".



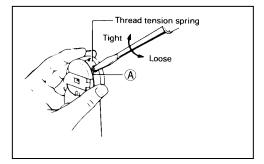


Fig.18 Fig.19

#### 23. Adjustment of presser pressure (Fig.20):

- 1) Pressure should be adjusted according to the material to be sewn.
- 2) Pressure on both the walking foot and the presser foot can be adjusted.
- 3) Sewing pressure should be adjusted to the minimum required strength.

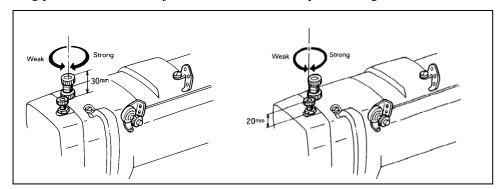
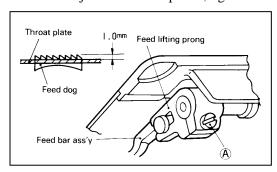


Fig.20

#### 24. Feed dog height (Fig.21):

- 1) Feed dog should be 1.0mm higher than the throat plate.
- 2) To adjust the dog height as follows:
  - (1) Loosen the screw "A", move the feed bar upward and downward.
  - (2) When adjustment is completed, tighten the screw "A".



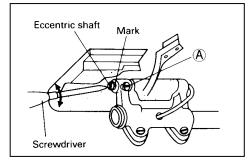


Fig.21

Fig.22

#### 25. Adjustment of feed dog inclination (Fig.22):

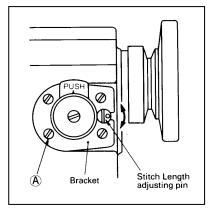
If necessary, adjust the inclination according to the material to be sewn as follows:

- 1) Loosen the screw "A".
- 2) Rotate the eccentric shaft clockwise or counterclockwise with screw driver.
- 3) Tighten the screw "A".

Position of n eccentri		Feed dog
<b>D</b> -	Horizontal	Standard
⊕'	Up	Front up (MAX.)
Ð	Down	Front down (MAX.)

#### 26. Adjustment of stitch length and forward/backward sewing (Fig.23):

- 1) Loosen the set screws located in the bracket.
- 2) Rotate the stitch length adjusting pin until the desired length is reached as follows:
  - (1) Clockwise: Increases the stitchlength in forward sewing, and decreases the stitch length in backward sewing.
  - (2) Counterclockwise: Decreases the stitch length in forward sewing, and increases the stitch length in backward sewing.



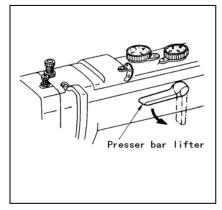


Fig.23

Fig.24

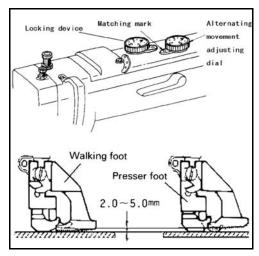
#### 27. Presser bar lifter (Fig.24):

Rotate the presser bar lifter in the direction of the arrow. This raises the presser foot.

#### 28. Adjustment of walking foot and presser foot:

- 1) Adjustment of alternating movement (Fig25):
- (1) The alternating movement on the walking foot and presser foot can be adjusted by using adjusting dial located on the top cover.
- (2) Adjusting the locking device to the max number (5mm). Adjusting the locking device to the same number marked on the alternating movement adjusting.
- (3)Face the desired number printed on the dial to the matching mark located on the top cover. The number printed on the dial represents the possible protrusion of the walking foot and presser foot from the throat plate when the alternating movements on these are evenly set.
- (4) The alternating movements can be readjusted up to 2.0-5.0mm. While doing ruffling sewing, the foot interactive volume should be 2.0-3.0mm at the scope of regulation
- 2) To change the balance of the alternating movements between the walking foot and presser foot (Fig.26):
  - (1) To increase the rise of the walking foot and decrease the rise of the presser foot:
    - ① Remove the rubber plug of top cover.
    - ② Rotate the pulley until the presser foot is slightly raised from the throat plate.
    - 3 Loosen screw "A" (on the right side)

- ④ The built-in spring pulls down the presser foot until it makes contact with the throat plate. Tighten the screw "A".
- ⑤ After this adjustment, the protrusion of the presser foot has been decreased by a set distance. And the vertical motion of the walking foot has been increased by the same distance.
- (2) As a contrary case (1), to decrease the rise of the walking foot and increase the rise of presser foot as follows:



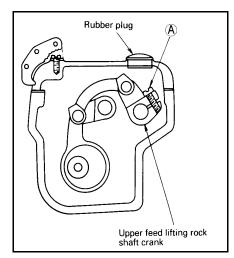
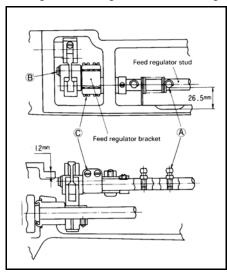


Fig.25

Fig.26

Fist, rotate the pulley until the walking foot is slightly raised from the throat plate. Next, loosen screw "A". Finally, tighten screw "A". This decreases the rise of the walking foot.

3) Installing the feed regulator bracket (Fig.27):



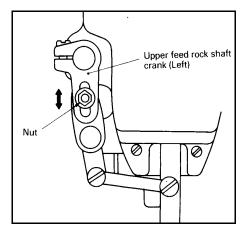


Fig.27

Fig.28

Note: If the feed regulator bracket is poorly positioned, the resultant alternating movements may be too short or long, causing defective machine operation.

- (1) Set the clearance between special screw "A" located on the regulator stud and the side wall of the machine arm to 26.5mm as Fig.27.
- (2) With the feed regulator stud held as explained is step (1) above, adjust the feed regulator bracket. This adjustment should insure a clearance of 12mm between the periphery of pin "B" located on the feed regulator bracket and the top cover mounting face located on the arm. Tighten screw "C".
  - 4) Feed pitch adjustment of walking foot (Fig.28):

Momentum regulation must be put differential subscript circled up to the minimum (non-differential under feeding status), then the upper and lower feed ratio should be adjusted to 1: 1 to ensure the accuracy of devices on adjustment differential

Upper position→Feed pitch→Small

Lower position→Feed pitch→Large

#### 29. Adjustment of feed timing (Fig.29):

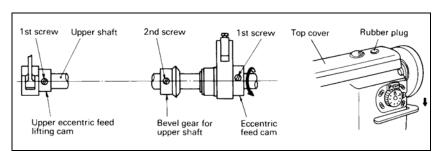


Fig.29

- 1) The standard position of the eccentric feed cam and eccentric feed lifting cam are illustrated to Fig.29
- 2) Open the top cover, properly slide the eccentric ring to adjust the position. The eccentric feed cam can also be adjusted by removing the rubber plug located on the top cover. In the latter case, however, the built-in bevel gear is concealed; care should be taken when adjusting.

#### 30 Adjustment of thread trimmer mechanism:

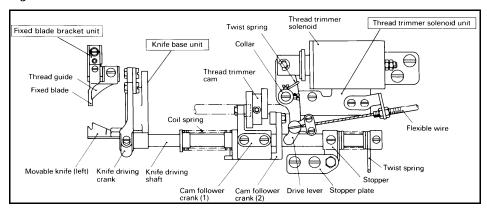


Fig.30

- 1) The thread trimmer mechanism illustrated as Fig.30.
- 2) Relation between the fixed blade and movable knife (left) edge:
  - (1) The standard position is illustrated as Fig.31.
  - (2) The distance between the fixed blade and movable knife is 0.3mm.
  - (3) The correct position of fixed blade bracket or fixed blade can be adjusted according to Fig.31.

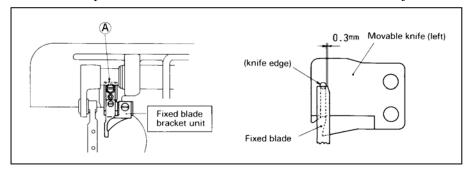


Fig.31

- 3) Knife driving shaft:
  - (1) The standard position is illustrated as Fig.32.
  - (2) When assembling, the knife driving shaft must first be put through the drive arm.
- (3) Cam follower crank 1 must be positioned as illustrated to the right, and secured on the recess located on the knife driving shaft.
  - (4) The stopper must be secured on the recess in such a way that the knife driving shaft is snug and smoothly rotates in the shaft direction.

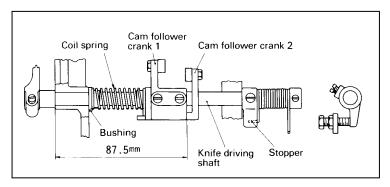


Fig.32

4) Installing the thread trimmer solenoid unit (Fig.33):

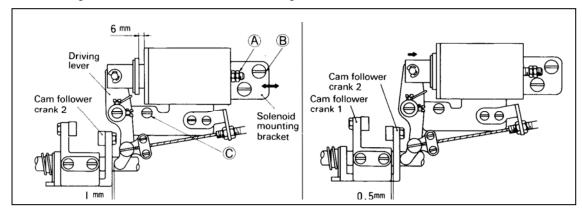


Fig.33

- (1) Operation stroke of the thread trimmer solenoid:
- a. Standard operation stroke is 6.0mm.
- b. This stroke can be adjusted by using nut "A".
- (2) Installing the unit:
- a. The unit can be mounted by using screws "B" and "C".
- b. Clearance of 1.0mm must be insured between the driving lever and cam follower crank 2 with stopper nut "A" made contact with solenoid.
- c. In such a situation, activating the solenoid should create a clearance of 0.5mm between cam follower crank 1 and 2. This situation is standard. To meet this standard, slide the solenoid mounting bracket in the direction of the arrow as illustrated, if adjustment is needed.
- 5) Installing the thread trimming cam (Fig.34):
  - (1) Face the 2nd timing mark "A" (GREEN) located on the pulley to the matching mark on the arm.
  - (2) With the thread trimmer solenoid activated, rotate the thread trimmer cam forward until the cam makes contact with the roller. Then, secure the cam.
  - (3) With the thread trimmer solenoid deactivated, allow the cam follower crank 2 to return to its

original position. This should create a clearance of 0.5mm-1.0mm between the cam and roller end. This distance is standard.

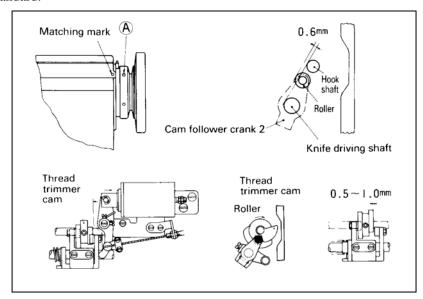


Fig.34

- 6) Adjustment of knife engagement (Fig.35):
  - (1) Position of movable knife (left) and fixed blade:

See the Fig.35, the standard distances from the needle center are 7.5mm and 5mm from the movable knife (left) and fixed blade respectively.

(2) Adjustment of knife engagement:

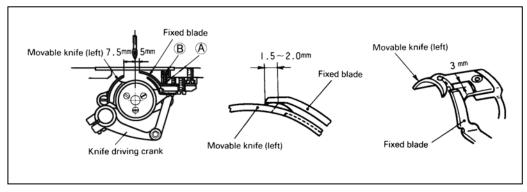


Fig.35

With the solenoid activated, turn on the machine. This rotates the thread trimming cam which rotates the movable knife (left). When the movable knife (left) has moved to its farthest distance, the standard engagement of the blade is 1.5mm-2.0mm. The engagement can be adjusted by properly mounting the drive arm.

- (3) Adjustment of knife engagement pressure:
- a. If a thread is poorly cut, particularly when it is thick, slightly increase the engaging pressure. This should solve the problem.
  - b. The engaging pressure can be adjusted in this way: Loosen lock nut "B" and adjust it by using adjusting screw "A".

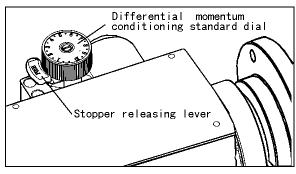
#### 31. Adjustment of top Differential regulation of devices (Fig. 37, 38)

1) If adjusting the differential momentum, you should first press the differential reset button (Figure 38) ,on differential device in a state of non-shrink joints, and then press as shown in Figure 37

the "push" on positioning plate,

at last rotate the differential Momentum conditioning standard dial

- 2) when the differential Momentum conditioning standard dial turn right, reducing the charge on delivery, turn left, increased charge on delivery.when Rotating conditioning standard dial to the minimum, the ratio with the volume of the cloth sending up and down is 1:1 ,when the number of marked scale in rotating dial switch to the "10", the ratio with the volume of the cloth sending up and down is 2:1
- 3) Doing flat seam for Long time, dial superscript circled of the differential momentum standard up to the minimum.



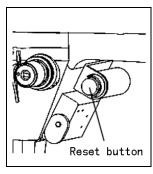


Fig. 37

Fig. 38

#### 32. Ruffling sewing reset (Fig. 38)

If you want make a period of ruffling sewing and a period of Ordinary sewing at a piece of suture material, the steps are:

Ruffling sewing - press the reset button - Ordinary sewing

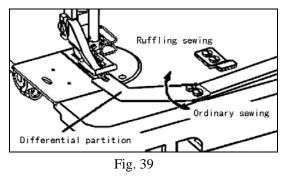
Ordinary sewing - press the reset button - ruffling sewing

ruffling sewing after restoration, remove the differential partition, the model can be used for general feed lockstitcher, the largest stitch length can arrive to 8mm, interactive capacity of pressure foot adjust between 2-5mm

## 33. Use of the Differential partition (Fig.39)

During ruffling sewing, differential pressure partition below the top feed dog, the upper and lower suture material can sew separating by differential partition; During Ordinary sewing sewing, put away the differential partition and placed it where do not affect the sewing.

#### 34. Adjustment of the presser of retral presser foot mechanism (Fig.40)



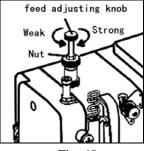


Fig. 40

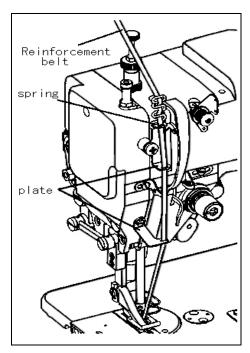
1) release the nut, rotating the feed adjusting knob.the presser to the retral feed dog will become stronger when turning the knob clockwise, and weaker when turning counterclockwise.

2)adjust the presser of retral presser foot mechanism in accordance with the plasticity of suture material, sewing soft material, the presser of retral presser foot mechanism properly tune small, there is conducive to feeding; sewing rigid materials, the presser of retral presser foot mechanism properly tune big, and is conducive to the formation of folds and feed.

3) If the presser of presser foot mechanism is too much big, presser foot mechanism will rise from the feed dog, causing material damage to joints, so the above circumstances occur, the pressure not to pin too much stress.

#### 35. Wearing reinforcing belt (Fig.41)

Referring to Figure 41 fot how to wear reinforcing belt, First make reinforcing belt going through spring (damping trough), then going through the zone plate with two long trough, finally put reinforcing belt into the long trough of press foot.



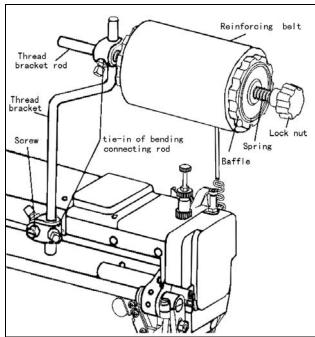


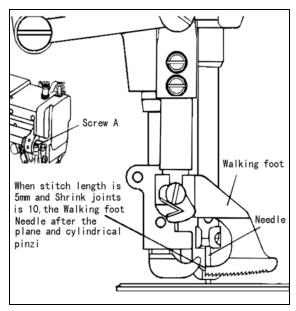
Fig. 41 Fig. 42

#### 36. Install the stand of Reinforcing belt (Fig.42)

First put bolt in the chassis left side of face tightened, and then put the parts using tie-in of bending connecting rod installed on the machine ,the way how to adjust the resistance of Reinforcing belt is to compress on both sides of the spring.

#### 37. Adjustment of front back positions for presser foot (Fig.43)

- 1) Adjust the stitch length to 5mm, and adjust the differential Momentum conditioning standard dial to the "10";
- 2) Release the bolt A, put the foot after the external pressure placed on the plane with machine needle cylindrical Pinzi position (as shown in Figure 43), tighten the screw A



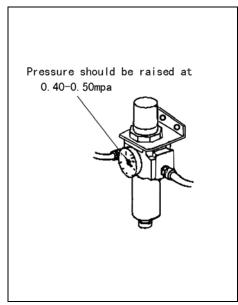
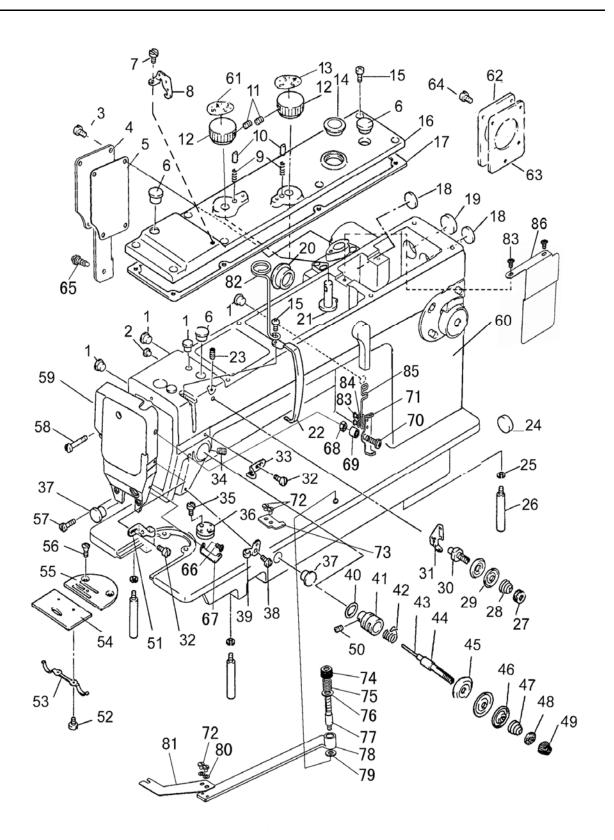


Fig. 43 Fig. 44

#### 38. Adjustment of the air pressure of decompressing relief (Fig.44)

Air pressure of decompressing relief should be raised at 0.40-0.50mpa to ensure the regulation of stability in differential momentu and the life of differential momentum swing rod.if the air pressure is too large, it is too big wallop to Feed regulator when the cylinder works and it is easily to deform the Feed regulator. if the air pressure is too small, it will affect the stability of adjustment with differential momentum.

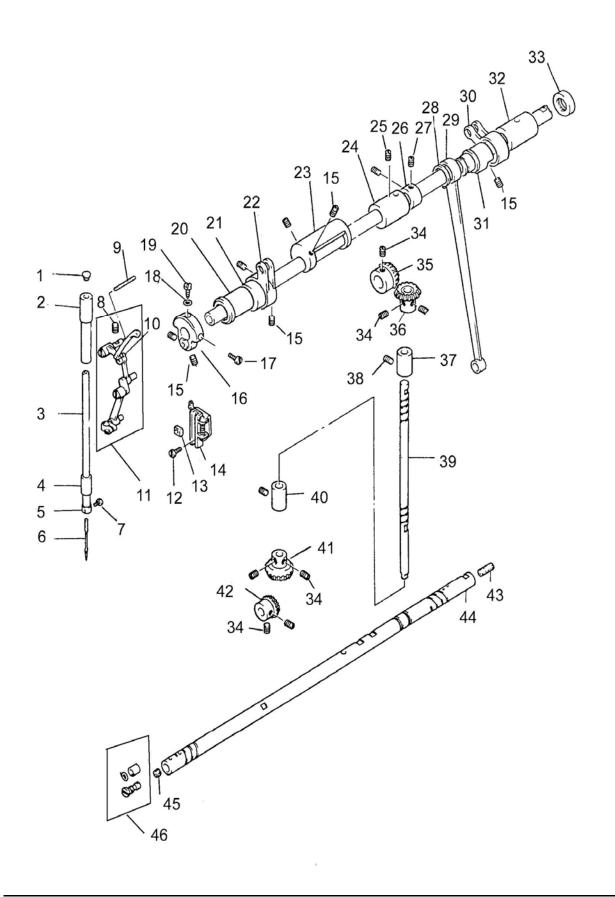


# A.ARM BED MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
A01	HA300B2090	Rubber plug	4	φ8.8
A02	HA300B2110	Rubber plug	1	φ5.7
A03	HA300B2170	Screw	4	
A04	HM22B18001	Arm side cover	1	
A05	H6029B8001	Gasket for arm side cover	1	
A06	HA307B0673	Rubber plug	3	φ11.8
A07	HA700F2100	Screw	1	SM11/64(40)×7
A08	H6017B8001	Thread guide	1	
A09	H6022B8001	Coil spring for upper feed lifting	2	
A10	H6023B8001	Stopper pin for upper feed lifting	2	
A11	H431040060	Set screw	2	GB/T80 M4×6
A12	H6025B8001	Dial for upper feed lifting	2	
A13	H6026B8001	Plate for upper feed lifting	1	
A14	HA309B0069	Oil check window	1	
A15	HA111G0683	Screw	8	SM11/64(40)×12
A16	H6015B8001	Top cover	1	
A17	H6016B8001	Gasket for top cover	1	
A18	H6030B8001	Rubber plug	2	
A19	H6031B8001	Rubber plug	1	
A20	H6032B8001	Rubber plug	1	
A21	H6020B8001	Upper feed lifting regulator cam	2	
A22	HA600C2020	Thread take-up cover	1	
A23	HA100B2110	Set screw	1	SM11/64(40)×5.5
A24	HA300B2100	Rubber plug	1	
A25	H005008060	Spring washer	3	GB/T93 6
A26	HA100B2220	Leg	3	
A27	HA710B0671	Pre-tension adjusting nut	1	SM11/64(40)
A28	HA710B0672	Thread tension spring	1	
A29	HA112B0693	Thread tension disc	2	
A30	HA710B0673	Thread tension stud	1	SM11/64(40)×31
A31	HA710B0674	Thread guide	1	
A32	HA106B0676	Screw	2	SM9/64(40)×6
A33	HA600B2050	Thread guide	1	
A34	HA300B2080	Set screw	1	SM15/64(28)×6.8
A35	HA300B2130	Screw	2	SM11/64(40)×5.5
A36	H2000B2040	Cloth guide plate	1	
A37	HA307B0674	Rubber plug	1	
A38	HA114I0674	Screw	1	SM9/64(40)×4.5
A39	HA500C2060	Thread guide	1	
A40	HA115B7011	O-ring	1	S15
A41	HA310B0703	Thread tension regulator bushing	1	
A42	HA806B0671	Thread take-up spring	1	
A43	H6725B8001	Thread releasing pin	1	

# A.ARM BED MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
A44	HA806B0673	Thread tension stud	1	SM1/4(40)×49
A45	HA310B0705	Thread tension disc	2	
A46	HA310B0702	Thread tension releasing disc	1	
A47	H2206B0671	Thread tension spring	1	
A48	HA115B7010	Thumb nut revolution stopper	1	
A49	HA310B0701	Thumb nut	1	
A50	HA115B0708	Screw	1	SM9/64(40)×6
A51	HA607B0671	Thread guide	1	
A52	HA124B0713	Screw	2	SM3/32(56)×2.2
A53	HA124B0712	Plate spring for slide plate	1	
A54	H6812B8001	Slide plate	1	
A55	HA500B2030	Needle plate	1	
A56	H2000B2050	Screw	2	SM11/64(40)×8.85
A57	HA700B2030	Screw	2	SM11/64(40)×20
A58	H5341B8001	Screw	1	SM11/64(40)×26
A59	HM21B28001	Face plate	1	
A60	HM20B58001	Arm	1	
A61	H6027B8001	Plate for upper feed lifting	1	
A62	H6409B8001	Arm bed cover	1	
A63	H6410B8001	Gasket for arm bed cover	1	
A64	HA300B2160	Screw	5	SM11/64(40)×12
A65	HM22B27101	Screw	1	
A66	HA106B0676	Screw	1	SM9/64×40/6
A67	HM22B08001	Strap guide	1	
A68	H003001060	Nut	1	M6
A69	HM21B38001	Washer	1	
A70	H409060200	Screw	1	M6×20
A71	HM21B58001	Strap guide	1	
A72	H3410C301L	Screw	4	SM9/64(40)×4
A73	HM22B58001	Stopper	1	
A74	HA115B0702	Nut	1	SM1/4(40)
A75	HK810H8001	Spring	1	
A76	H7342G8001	Washer	1	
A77	HK809H8001	Screw	1	SM11/64(40)×7.5
A78	HK806H8001	Gauge bearing bracket stopper	1	
A79	H7362G8001	Washer	1	
A80	H6644C8001	Washer	2	
A81	HM22B48001	Clapboard	1	
A82	HM22B78001	Strap guide	1	
A83	HA500C2070	Screw	4	SM9/64(40)×5
A84	H6644C8001	Washer	2	
A85	HM21B68001	Strap guide	1	
A86	HM22B68001	Arm sidecover baffle	1	

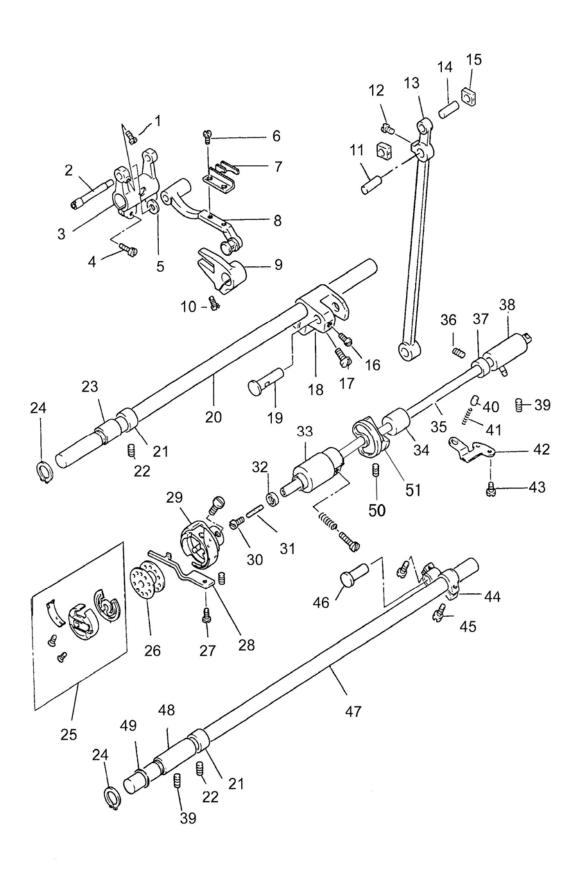


# **B.SEWING MECHANISM**

Fig.	Part No.	Description	Pcs.	Remarks
B01	HA300B2090	Rubber plug	1	
B02	H2009B0067	Needle bar bushing (upper)	1	
В03	H6005C8001	Needle bar	1	
B04	H6006C8001	Needle bar bushing (lower)	1	
B05	H2000G2020	Thread guide	1	
B06	H2000G2030	Needle	1	DP×17 #22
B07	HA100C2170	Set screw	1	SM1/8(44)×4.5
B08	HA100C2020	Screw	1	SM15/64(28)×10
B09	HA700H2040	Felt	1	
B10	HA804H0651	Oil shade cap	1	
B11	H6007C7101	Thread take-up lever assay	1	
B12	H4967K8001	Screw	2	SM11/64(40)×7.2
B13	HA100C2200	Slide block	1	
B14	H2205C0661	Needle bar connecting link guide	1	
B15	HA307C0662	Set screw	2	SM1/4(40)×6
B16	H6023C8001	Needle bar crank	1	
B17	HA100C2060	Screw	1	SM9/32(28)×13
B18	HA705C0662	O-ring	1	
B19	HA100C2070	Set screw	1	SM9/32(28)×14
B20	H6011C8001	Upper shaft bushing (upper)	1	
B21	H6013C8001	Upper feed lifting cam	1	
B22	H6016C8001	Upper feed rock crank (left)	1	
B23	H6015C8001	Balance weight	1	
B24	HA100D2040	Upper shaft bushing (middle)	1	
B25	HA3411D308	Screw	1	SM15/64(28)×7
B26	HA108G0661	Collar for upper shaft	1	
B27	HA105D0662	Screw	2	SM1/4(40)×4
B28	HA112D3012	C-type retaining ring	1	20
B29	H6020C8001	Crank rock	1	
B30	H6019C8001	Upper feed rock crank (right)	1	
B31	H6018C8001	Upper feed lifting cam (right)	1	
B32	H6021C8001	Upper shaft bushing (right)	1	
В33	HA306D0066	Oil seal	1	
B34	HA108C0663	Screw	8	SM1/4(40)×7
B35	HA113D2112	Upper shaft gear	1	
B36	HA113D2122	Vertical shaft gear (upper)	1	
B37	HA100D2110	Vertical shaft bushing (upper)	1	
B38	HA100C2020	Screw	2	SM15/64(28)×10
B39	H6022C8001	Vertical shaft	1	
B40	HA600D2010	Vertical shaft bushing (lower)	1	
B41	HA113D2222	Vertical shaft gear (lower)	1	
B42	HA113D2212	Lower shaft gear	1	
B43	HA104D0652	Rubber plug	1	

# **B.SEWING MECHANISM**

Fig.	Part No.	Description	Pcs.	Remarks
B44	H6010C8001	Upper shaft	1	
B45	HA704C0653	Felt	1	
B46	HA7121C104	Oil amount adjusting pin assay	1	
		l		

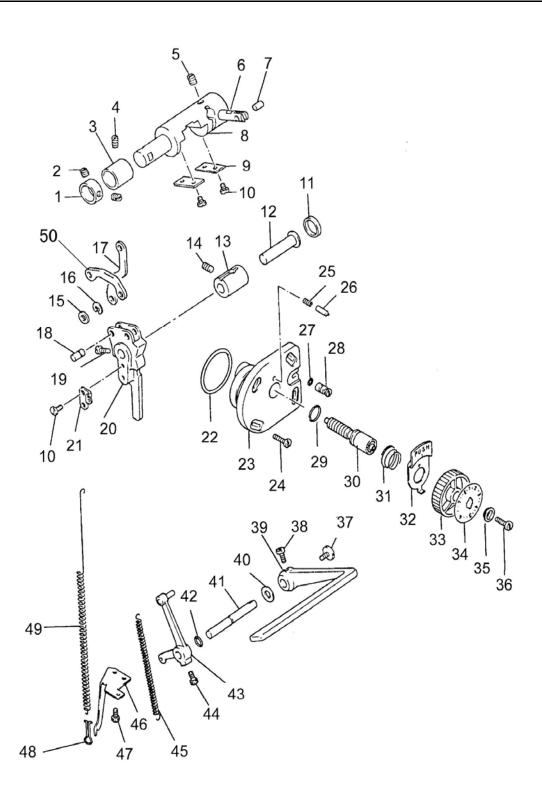


# C.SEWING MECHANISM & FEED ROCK LOWER SHAFT

Fig. No.	Part No.	Description	Pcs.	Remarks
C01	HA300C2030	Screw	1	SM11/64(40)×8
C02	HA705J0654	Shaft for feed bar (eccentric)	1	
C03	HA104G0011	Feed rock shaft crank	1	
C04	HA104G0012	Screw	2	SM3/16(28)×12
C05	HA104G0656	Washer	1	
C06	HA104G0654	Screw	2	SM1/8(44)×6
C07	H6005D8001	Feed dog	1	
C08	HA705J0021	Feed bar assay	1	
C09	H1204D0651	Feed lifting rock shaft fork	1	
C10	HA111G0683	Screw	1	SM11/64(40)×12
C11	H6010D8001	Upper feed rock shaft	1	
C12	HA300C2030	Screw	1	SM11/64(40)×8
C13	H6011D8001	Connecting rod for upper feed	1	
C14	H6012D8001	Upper feed rock shaft	1	
C15	H4722G8001	Square block	2	
C16	HA113F0684	Screw	1	SM15/64(28)×8.5
C17	HA800F2020	Screw	1	SM15/64(28)×13.5
C18	H6008D8001	Feed rock shaft crank (right)	1	
C19	H6009D8001	Pin	1	
C20	H6006D8001	Feed rock shaft	1	
C21	HA105D0661	Collar for feed rock shaft	2	
C22	HA105D0662	Screw	4	SM1/4(40)×4
C23	HA100G2040	Bushing for feed rock shaft	1	
C24	H007009150	C-type retaining ring	1	GB/T894.1 15
C25	HA900E2030	Bobbin case	1	
C26	HA600E2060	Bobbin	1	
C27	HA100E2150	Screw	1	SM11/64(40)×10
C28	H2100E2010	Hook positioner	1	
C29	H2200C2050	Rotating hook	1	
C30	HA1111E104	Screw	1	SM3/16(32)×9.7
C31	HA1111E204	Oil felt for hook shaft	1	
C32	HA700E2030	Oil seal	1	
C33	HA704B0654	Bushing for hook shaft (left)	1	
C34	HA704B0653	Bushing for hook shaft (middle)	1	
C35	H6015D8001	Hook shaft	1	
C36	HA305E0662	Screw	2	SM15/64(28)×4.5
C37	HA305E0661	Collar for hook shaft	1	
C38	HA311E0671	Bushing for hook shaft (right)	1	
C39	HA100C2020	Screw	1	SM15/64(28)×10
C40	HA300E2100	Plunger	1	
C41	HA300E2110	Coil spring	1	
C42	HA300E2040	Guide plate	1	
C43	HA104F0654	Screw	1	SM15/64(28)×10

# C.SEWING MECHANISM & FEED ROCK LOWER SHAFT

C44 HA705K0661 Feed lifting ro		Pcs.	Remarks
C44   HA703K0001   recu mung to	ck shaft crank (right)	1	
C45 HA104G0012 Screw		2	SM3/16(28)×12
C46 HA100G2070 Pin		1	
C47 H6013D8001 Feed lifting ro	ck shaft	1	
C48 HA100G2120 Bushing for fe	ed lifting shaft	1	
C49 HA100G2130 Washer		1	
C50 HA710E0692 Screw		2	SM1/4(40)×10
C51 HA710E0691 Thread trimme	er cam	1	

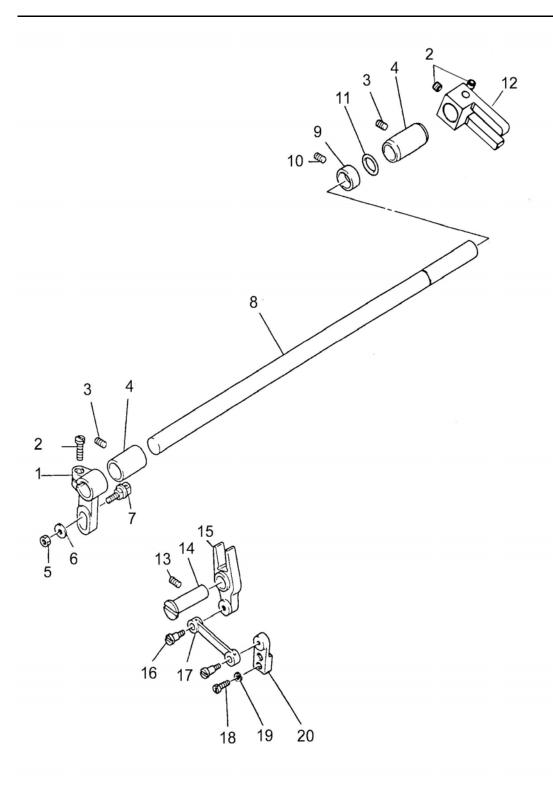


# D.STITCH LENGTH MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
D01	HA108G0661	Collar for reverse bar	1	
D02	HA105D0662	Screw	2	SM1/4(40)×4
D03	HA100G2040	Bushing for reverse bar	1	
D04	HA100B2110	Screw	1	SM11/64(40)×5.5
D05	HA100C2020	Screw	1	SM15/64(28)×10
D06	H6007E8001	Bracket pin	1	
D07	H6008E8001	Pin	1	
D08	H6006E8001	Reverse bar	1	
D09	H4723G8001	Guide plate	2	
D10	HA300C2030	Screw	6	SM11/64(28)×8
D11	HA700B2120	Rubber plug	1	
D12	HA100F2040	Pin	1	
D13	HA704B0655	Bushing for feed regulator	1	
D14	HA3411D308	Screw	1	SM15/64(28)×7
D15	H6012E8001	Washer	2	
D16	H007013040	E-type ring	2	GB/T896 4
D17	H6010E8001	Link	1	
D18	H6013E8001	Pin	2	
D19	HA113F0684	Screw	1	SM15/64(28)×8.5
D20	H6009E8001	Feed regulator	1	
D21	H6018E8001	Spring retainer	1	
D22	HC01360	O-ring	1	GB3452.1 36
D23	H6015E8001	Bracket	1	
D24	HA100E2150	Screw	4	SM11/64(40)×10
D25	HA100F2090	Spring for stopper pin	1	
D26	HA700F2030	Stopper pin	1	
D27	HA113F3022	O-ring	1	
D28	H6017E8001	Feed regulator pin	1	
D29	HA109F0674	O-ring	1	
D30	HA720F0681	Screw bar	1	
D31	HA720F0687	Coil spring	1	
D32	HA720F0683	Stopper pin releasing lever	1	
D33	HA7421F120	Dial	1	
D34	H2205D0661	Plate for stitch length	1	
D35	HA720F0685	Bushing	1	
D36	HA720F0686	Screw	1	SM3/16(28)×18
D37	HA113F0683	Screw	1	SM3/16(28)×6.5
D38	HA104F0654	Screw	2	SM15/64(28)×10
D39	HA309F0671	Feed reversing lever	1	
D40	HA100F2110	Spring washer	1	
D41	H3008F0671	Feed reversing lever shaft	1	
D42	HA113F3022	O-ring	1	
D43	H6020E7101	Crank for feed reversing lever	1	

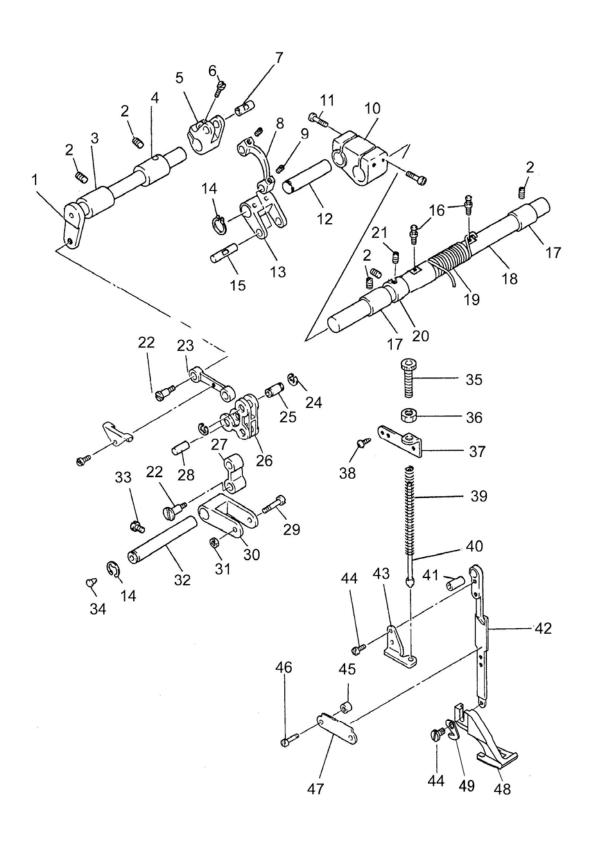
# D.STITCH LENGTH MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
D44	HA100F2130	Screw	1	SM15/64(28)×14.5
D45	H6023E8001	Spring	1	
D46	HA800F2010	Spring holder	1	
D47	HA800F2020	Screw	1	SM15/64(28)×13.5
D48	HA806C0675	Spring holder	1	
D49	HA806C0674	Coil spring	1	
D50	H6011E8001	Link for reserve feed	1	



# E.UPPER FEED ROCK SHAFT MECHANISM

Fig.	Part No.	Description	Pcs.	Remarks
E01	H6006F8001	Upper feed rock shaft crank (left)	1	
E02	H431060050	Screw	2	
E03	HA100B2110	Screw	2	SM11/64(40)×5.5
E04	H6008F8001	Bushing for upper feed rock shaft crank	2	
E05	H2013N0067	Nut	1	SM1/4×24
E06	H2013J0065	Washer	1	6
E07	H2121I0065	Feed connecting slick block	1	
E08	HM20F68001	Upper feed rock shaft	1	
E09	HA108G0661	Collar	1	
E10	HA105D0662	Screw	2	SM1/4(40)×4
E11	H6018F8001	O-ring	1	
E12	HK852H8001	Upper feed rock shaft crank	1	
E13	HA3411D308	Screw	1	SM15/64(28)×7
E14	H6010F8001	Hinge pin	1	
E15	H6015F8001	Feed connecting lever	1	
E16	H2004J0662	Screw	2	SM1/4(40)×5
E17	H6016F8001	Walking foot connecting rod	1	
E18	H2004J0067	Screw	2	SM9/64(40)×7
E19	HA100I2050	Spring washer	2	3.5
E20	H2004J0661	Feed arm	1	

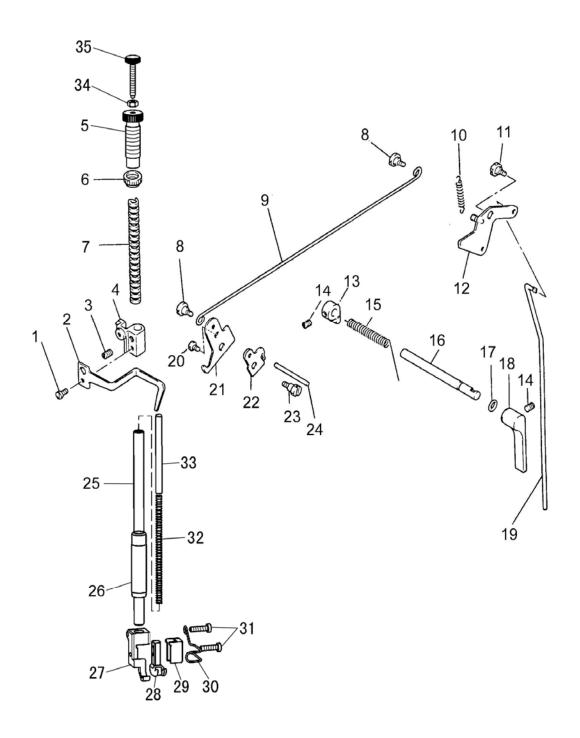


# F.UPPER FEED LIFTING ROCK SHAFT MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
F01	H6005G8001	Upper feed lifting rock shaft	1	
F02	HA100B2110	Screw	4	SM11/64(40)×5.5
F03	H6006G8001	Bushing for upper feed lifting rock shaft (left)	1	
F04	H6007G8001	Bushing for upper feed lifting rock shaft (right)	1	
F05	H6009G8001	Upper feed lifting rock crank	1	
F06	H5336H8001	Screw	1	SM15/64(28)×13.5
F07	H6010G8001	Upper feed lifting rock crank shaft	1	
F08	H6011G8001	Link	1	
F09	H6039G8001	Screw	2	SM11/64(40)×3.8
F10	H6013G8001	Upper feed regulator bracket	1	
F11	HA7311C606	Screw	4	SM11/64(40)×15
F12	H6014G8001	Shaft for upper feed lifting rock shaft	1	
F13	H6015G8001	Crank for upper feed lifting rock crank	1	
F14	H007009100	C-type ring	1	GB/T894.1 10
F15	H6016G8001	Pin	1	
F16	H6020G8001	Cam follower	2	SM15/64(28)×10
F17	HA100G2040	Bushing for upper feed shaft	2	
F18	H6019G8002	Upper feed regulator shaft	1	
F19	H6021G8002	Spring	1	
F20	HA108G0661	Collar	1	
F21	HA105D0662	Screw	2	SM1/4(40)×4
F22	H2004J0662	Screw	2	SM1/4(40)×5
F23	H6023G8001	Link for feed lifting rock shaft	1	
F24	H007013060	E-type ring	2	GB/T896 6
F25	H6022G8001	Pin	1	
F26	H6024G8001	Bell crank	1	
F27	H6027G8001	Link	1	
F28	H6028G8001	Pin	1	
F29	H6029G8001	Stud screw	1	SM15/64(28)×5
F30	H6030G8001	Bell crank support	1	
F31	H6040G8001	Nut	1	SM15/64(28)
F32	H6031G8001	Bell crank support shaft	1	
F33	HA110D0672	Screw	1	SM15/64(28)×12
F34	HA300B2110	Rubber plug	1	
F35	H2010J0065	Thumb screw	1	SM9/32(28)×35
F36	H2010J0066	Nut	1	SM9/32(28)
F37	H6032G8001	Presser regulating bracket	1	
F38	HA300C2030	Screw	2	SM11/64(40)×8
F39	H6038G8001	Spring	1	
F40	H6034G7101	Spring guide bar assay	1	
F41	H6037G8001	Bushing for walking foot guide link	1	
F42	H6036G8001	Walking foot guide link	1	
F43	H6033G8001	Spring guide bar holder	1	

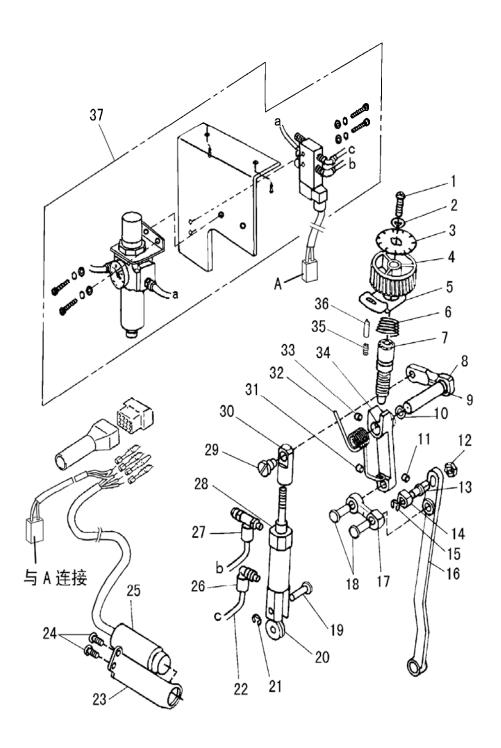
# F.UPPER FEED LIFTING ROCK SHAFT MECHANISM

Fig.	Part No.	Description	Pcs.	Remarks
F44 F45 F46 F47 F48 F49	H200012050 H2000N0040 HA111G0683 H2000N0030 HM20G68001 HM20G78001	Screw Washer Screw Walking foot guide bracket Walking foot Knife	3 2	SM9/64(40)×8 SM11/64(40)×12



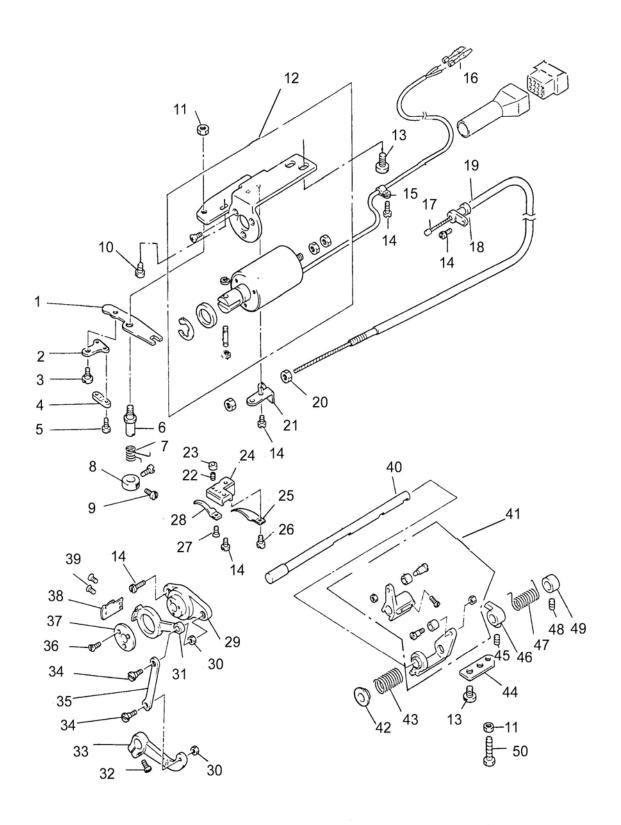
# **G.PRESSER FOOT MECHANISM**

Fig. No.	Part No.	Description	Pcs.	Remarks
G01	HA700F2100	Screw	1	SM11/64(40)×7
G02	H6023H8001	Thread guide	1	
G03	H6027H8001	Presser bar guide bracket	1	
G04	HA3411D308	Screw	1	SM15/64(28)×7
G05	H2400G2140	Thumb screw	1	SM1/2(28)×41.5
G06	HA117H0692	Nut	1	SM1/2(28)
G07	H6020H8001	Presser bar spring	1	
G08	HA107H0662	Screw	2	SM3/16(28)×3.5
G09	H6013H8001	Knee lifter rod	1	
G10	H6017H8001	Spring	1	
G11	HA100H2050	Stud bolt	1	SM15/64(28)×5.2
G12	H6016H8001	Knee lifter lever	1	
G13	H6009H7101	Presser bar lifting cam	1	
G14	HA305E0662	Screw	2	SM15/64(28)×4.5
G15	H6008H8001	Spring	1	
G16	H6007H8001	Presser bar lifting shaft	1	
G17	HA300H2080	O-ring	1	
G18	H6006H8001	Presser bar lifter	1	
G19	H6018H8001	Knee lifter connecting rod	1	
G20	HA107H1013	Screw	1	SM11/64(40)×6.5
G21	H6014H8001	Knee lifter lever (left)	1	
G22	HA305H6611	Tension releasing cam	1	
G23	HA100H2050	Stud bolt	1	SM15/64(28)×6.7
G24	H6037B8001	Thread releasing pin	1	
G25	HM20H68001	Presser bar	1	
G26	HA704B0651	Bushing for presser bar	1	
G27	HM21H08001	Presser foot	1	
G28	HM21H18001	Presser foot	1	
G29	HM21H28001	guide apparatus	1	
G30	HM21H48001	Walking foot guard cover	1	
G31	HD707F8001	Screw	2	M4×0.7/15.8
G32	HM022F8001	Spring	1	
G33	HM21H38001	Pin	1	
G34	H2400G2160	Nut	1	SM11/64×40
G35	H2400G2150	Screw	1	SM11/64×40/31



# H.DIFFERENTIAL MECHANISM

Fig.	Part No.	Description	Pcs.	Remarks
H01	HA720F0686	Screw	1	
H02	HA720F0685	Bush	1	
H03	HM308F8001	Plate for stitch length	1	
H04	HA7421F120	Dial	1	
H05	HA720F0683	Stopper pin releasing lever	1	
H06	HA720F0687	Coil spring	1	
H07	HM20L68001	Screw bar	1	
H08	HM22L28001	Feed regulator spindle	1	
H09	HA705C0662	O-ring	1	
H10	HM21L98001	Washer	1	
H11	H431050050	Screw	1	
H12	H2010J0066	Nut	1	
H13	HK830H8001	Screw	1	
H14	H2013N0651	Slide block	1	
H15	H007013040	E-type ring	1	
H16	HM21L78001	Feed driver connecting rod	1	
H17	HM21L58001	link rod	1	
H18	HM21L68001	Pin	2	
H19	HM22L58001	Pin	1	
H20	HM22L68001	Washer	2	
H21	H007013040	E-type ring	1	
H22	HM23L18001	windpipe	2	
H23	HM23L08001	Bracket	1	
H24	HA300B2160	Screw	2	SM11/64×40/10
H25	HM22L98001	reset button	1	
H26	HF937E8001	Windpipe joint	1	
H27	HEE4218001	Windpipe joint	1	
H28	HF15404013	Cylinder	1	GJ2D16D-T1247-15(SMC)
H29	H2004J0662	Screw	1	
H30	HM22L48001	Coupling	1	
H31	H431050050	Screw	1	
H32	HM22L08001	Coil spring	1	
H33	H431050050	Screw	2	
H34	HM21L48001	Feed regulator	1	
H35	HA100F2090	Spring for stopper pin	1	
H36	HA700F2030	Stopper pin	1	
H37	JGD0100011	Reducing valve and solenoid valve	1	

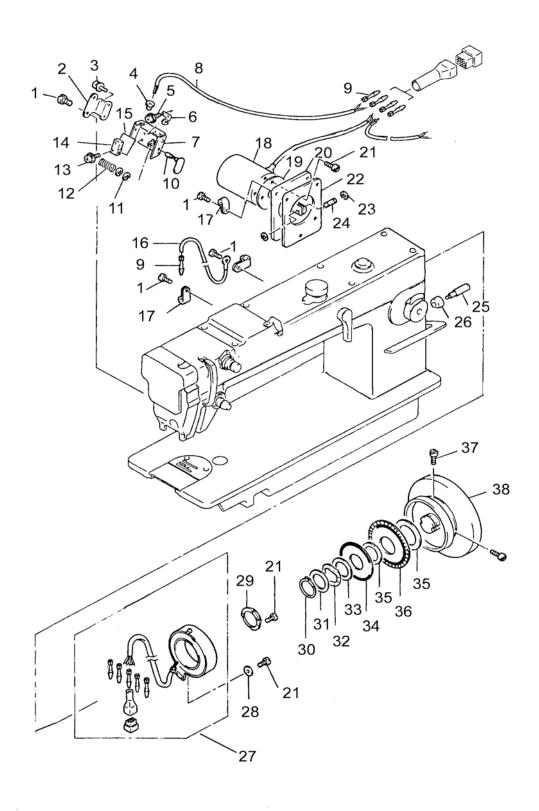


# I.KNIFE ACTUATING MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
I01	HA712N0698	Thread trimmer driving lever	1	
I02	HA712N6910	Flexible wire holder	1	
I03	HA712N0699	Stud screw	1	SM11/64(40)×8
I04	HA712N6911	Flexible wire presser	1	
105	HA712N6912	Screw	2	SM1/8(44)×7
I06	HA712N0695	Stud screw	1	
I07	HA712N0697	Trimmer lever spring	1	
108	HA712N0696	Spring support collar	1	
I09	HA7311CC06	Screw	2	SM9/64(40)×8.5
I10	HA100E2150	Screw	1	SM11/64(40)×10
I11	HA710N0683	Nut	1	
I12	H2208H0068	Thread trimmer solenoid	1	
I13	HA700N0080	Screw	4	SM15/64(28)×12
I14	HA300C2030	Screw	7	SM11/64(40)×8
I15	HA708P0668	Cord holder	1	
I16	HA7641B319	Terminal pin	2	
I17	H6005J8001	Flexible wire	1	
I18	HA300H2080	O-ring	1	
I19	H6004J7101	Flexible wire assay	1	
120	H003003050	Nut	2	GB/T6171 M5
I21	HA712N6913	Holder	1	
I22	HA7121N604	Screw	1	SM9/64(40)×8.5
I23	HA7121N704	Nut	1	SM9/64(40)
I24	HA7121N104	Bracket for fixed blade	1	
I25	H22121H204	Thread guide	1	
I26	HA7311CH06	Screw	1	SM9/64(40)×8
I27	HA7121N304	Screw	1	SM9/64(40)×5
I28	H22121H104	Fixed blade	1	
129	HA704N1111	Knife holding bracket saddle	1	
I30	HA7111N304	Nut	2	
I31	HA704N1112	Knife base (left)	1	
132		Nut	1	
133	HA7111N604	Knife driving crank	1	
I34	HA7111N204	Screw	2	SM11/64(40)×6.2
135	HA7111N404	Link	1	
I36	HA704N1114	Screw	3	SM1/8(44)×6
137	HA704N1113	Thrust washer	1	
I38	H2204H0651	Movable knife (left)	1	
139	HA7111N704	Screw	2	SM11/64(40)×7
I40	H6006J8001	Knife driving shaft	1	
I41	HA706N0066	Cam follower crank assay	1	
I42	HA700N0050	Bushing	1	
I43	HA700N0040	Coil spring	1	

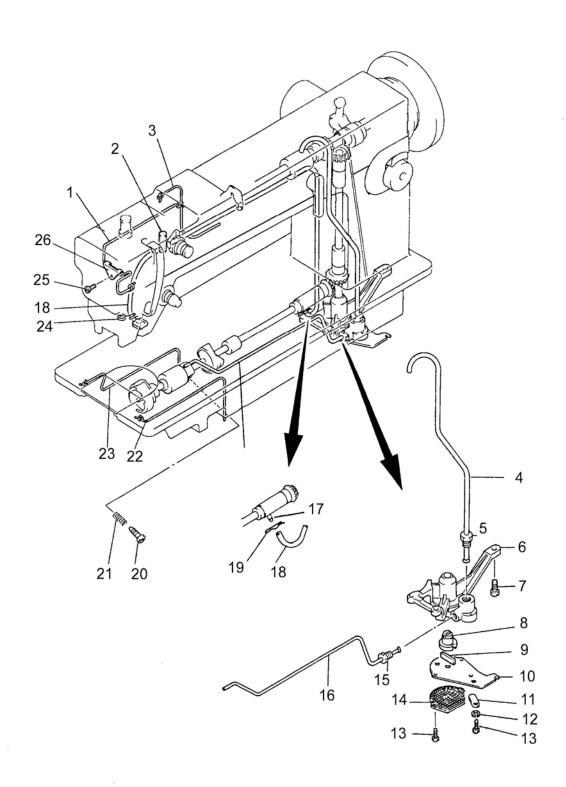
# I.KNIFE ACTUATING MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
I44	HA710N0682	Lever stopper plate	1	
I45	HA113F0684	Screw	1	SM15/64(28)×11.3
I46	HA906N0661	Stopper	1	
I47	HA700N0110	Coil spring	1	
I48		Screw	1	SM1/4(40)×4
I49	HA715N0071	Collar	1	
I50	HA7411N110	Screw	1	SM15/64(28)×23
				,



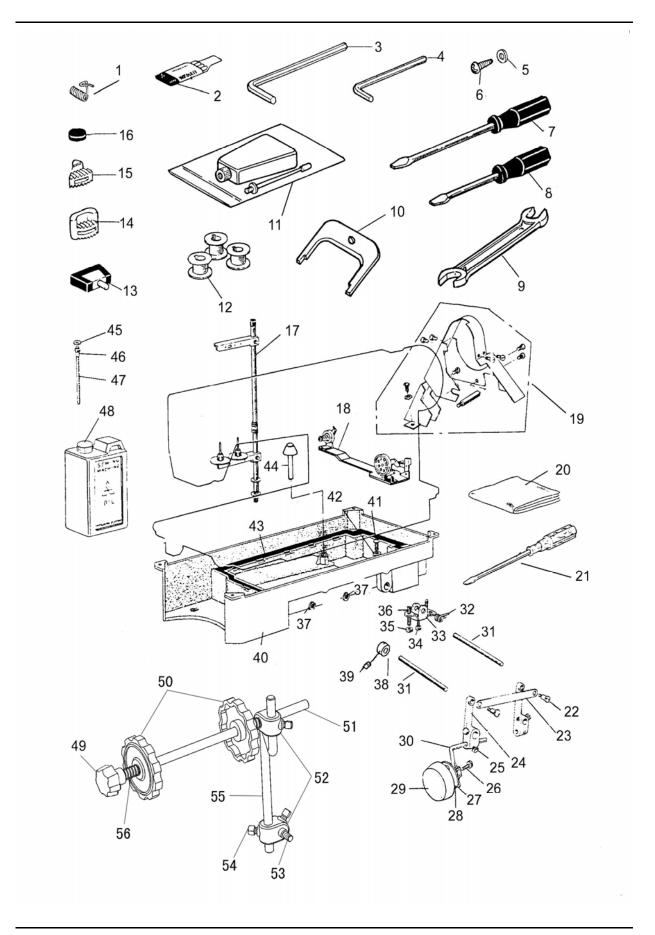
# J.TOUCH BACK AND DETECTOR MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
J01	HA300B2160	Screw	8	SM11/64(40)×10
J02	H6005K8001	Bracket	1	
J03	HA7221P508	Screw	2	
J04	HA704O0657	Rubber plug	1	
J05	HA704O0659	Screw	2	
J06	HA704O0654	Spring plate	1	
J07	H2205I0661	Bracket for touch switch	1	
J08	H6006K7101	Vinyl cap-tire cable for touch switch	1	
J09	HA7641B319	Terminal pin (male)	5	
J10	HA704O0021	Push button	1	
J11	H007013030	E-type ring	2	GB/T896 3
J12	HA704O0065	Spring	1	
J13	HA704O6510	Screw	2	M2×8
J14	HA704O0655	Micro switch	1	
J15	HA704O0658	Insulator set	1	
J16	HA705Q0065	Ground wire	1	
J17	HA700Q0030	Cord holder	2	HP-5N
J18	H6009K8001	Solenoid assay for touch back	1	
J19	H2006I0672	Gasket	1	
J20	H6010K8001	Arm side cover	1	
J21	HA300C2030	Screw	7	SM11/64(40)×8
J22	H6011K8001	Gasket	1	
J23	H007013040	E-type ring	2	
J24	HA712N0692	Pin	1	
J25	H6012K8001	Stud screw	1	
J26	H2204G0652	Rubber ring	1	
J27	HA703R0065	Detector bracket assay	1	
J28	HA703R0067	Washer	1	
J29	HA703R0066	Detector bracket supporter	1	
J30	HA111G0683	C-type ring	1	
J31	HA700R0060	Washer	1	
J32		Supporter spring	1	
J33	HA700R0040	Spacer B	1	
J34	HA700R0020	Speed command disc (up)	1	
J35	HA700R0030	Spacer A	2	
J36	HA700R0010	Speed command disc (down)	1	
J37	HA110D0672	Screw	2	SM15/64(28)×12
J38	H2204I0651	Pulley	1	



# K.OIL LUBRICATION MECHANISM

Fig.	Part No.	Description	Pcs.	Remarks
K01	H6019I8001	Oil wick	1	
K02	HA700B2150	Oil felt	1	
K03	H6019I8001	Oil wick	1	
K04	H6016I8001	Upper shaft oil tube	1	
K05	HA116I0682	Bushing	1	
K06	H6006I8001	Oil pump	1	
K07	HA100I2090	Screw	3	SM11/64(40)×13
K08	H6010I8001	Rooter	1	
K09	H6011I8001	Slider	1	
K10	H6012I8001	Oil pump cover	1	
K11	HA100I2070	Oil adjusting plate	1	
K12	HA100I2050	Spring washer	1	3.5
K13	HA100I2040	Screw	3	SM1/8(44)×13
K14	HA111I0065	Oil pump filter	1	
K15	HA113I0661	Bushing	1	
K16	H6014I8001	Lower shaft oil tube	1	
K17	HA110E0672	Oil pipe for lower shaft bushing	1	SM1/2(28)
K18	H6018I8001	Oil return tube	1	
K19	HA300I2030	Oil return tube clip	1	
K20	HA300E2030	Oil adjusting screw	1	SM15/64(28)×25.5
K21	HA100E2060	Oil adjusting spring	1	
K22	HA305G0664	Oil wick	1	
K23	HA304G0655	Oil wick	1	
K24	HA300I2060	Oil felt holder	1	
K25	HA106B0676	Screw	1	SM9/64(40)×6
K26	H6009I8001	Oil wick holder	1	



# **L.ACCESSORIES**

Fig.	Part No.	Description	Pcs.	Remarks
L01	HA505B0672	Thread take-up spring	1	
L02	H2000G2030	Needle	4	DP×17 #22
L03	H3200L0060	Socket wrench 3	1	
L04	HA704S0653	Socket wrench 2	1	
L05	HA300J2230	Washer for wood screw	4	
L06	H801045200	Wood screw	4	GB/T99 4.5×20
L07	HA300J2200	Screw driver (middle)	1	
L08	HA300J2210	Screw driver (small)	1	
L09	HA100J2160	Spanner	1	
L10	HA704S0654	Speed command disc adjusting disc	1	
L11	HA100J2110	Oil with oiler	1	
L12	HA600E2060	Bobbin	4	
L13	HA307J0067	Hinge with rubber cushion	2	
L14	HA100J2090	Vibration preventing rubber (large)	2	
L15	H3200L0030	Vibration preventing rubber (small)	2	
L16	HA100J2120	Magnet block	1	
L17	HA300J2370	Thread stand assay	1	GXJ-2A
L18	HA905S0066	Bobbin winder assay	1	
L19	H4954N7101	Belt guard assay	1	
L20	HA100J2180	Cover	1	
L21	HA300J2070	Screw driver (large)	1	
L22	H6017L8001	Screw	2	SM1/4(24)×10.7
L23	H6005L8001	Link	1	
L24	H6006L8001	Knee lifter driving crank	2	
L25	HA106J0664	Bolt	3	SM5/16(18)×13
L26	HA106J0667	Bolt	1	SM15/64(28)×8
L27	HA106J0666	Knee lifter plate stopper	1	
L28	HA106J0665	Knee lifter plate	1	
L29	HA106J0668	Knee lifter cover	1	
L30	HA106J0662	Knee lifter shaft	1	
L31	H6015L8001	Knee lifter shaft	2	
L32	HA104J0657	Coil spring	1	
L33	HA104J0658	Knee lifter	1	
L34	HA100F2130	Screw	1	SM15/64(28)×14.5
L35	HA104J6510	Nut	2	SM15/64(28)
L36	HA104J0659	Set screw	2	SM15/64(28)×28
L37	H007013090	E-type ring	1	GB/T896 9
L38	H6016L8001	Collar	1	
L39	HA100C2090	Screw	2	SM15/64(28)×4.5
L40	H6008L8001	Oil reservoir	1	
L41	HA104J0652	Screw	2	SM5/16(28)×10
L42	HA104J0653	Seal washer	2	
L43	H6009L8001	Gasket for oil reservoir	2	

# **L.ACCESSORIES**

Fig.	Part No.	Description	Pcs.	Remarks
L44	HA106J0661	Knee lifter lifting pin	1	
L45	HA600J2060	Gasket	1	
L46	HA600J2040	Screw	1	
L47	HA600J2050	Drainage tube	1	
L48	HA300J2170	Oil tank	1	
L49	HM21M08001	Nut	1	
L50	HM21M18001	Baffle	2	
L51	HM20M98001	Thread stand pole	1	
L52	HA106J0663	Knee lifter driving crank	2	
L53	HM20M78001	Screw	1	
L54	HA106J0664	Screw	4	
L55	HM20M88001	Thread stand	1	
L56	HE027B8001	Spring	2	

